entone™

Universal Remote Control

URC 4

User's Guide (North America Edition)

COPYRIGHT

©2011 Entone, Inc. All rights reserved. This document contains proprietary information protected by copyright. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of Entone, Inc., 20863 Stevens, Creek Blvd, Suite 300, Cupertino, CA 95014, U.S.A.

DISCLAIMER

IF THIS PRODUCT DIRECTS YOU TO COPY MATERIALS, YOU MUST HAVE PERMISSION FROM THE COPYRIGHT OWNER OF THE MATERIALS TO AVOID VIOLATING THE LAW WHICH COULD RESULT IN DAMAGES OR OTHER REMEDIES.

TRADEMARKS

Entone and the tagline "Connecting the Home" are trademarks of Entone, Inc. All other trademarks or registered trademarks belong to their respective owners.

CHANGES

The material in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Entone, Inc. assumes no liability resulting from the use of the information contained herein.

Entone, Inc. reserves the right to make changes in the product design without reservation and without notification to its users.

P/N: 99-98xx10-00

CUSTOMER SUPPORT AND CONTACT INFORMATION

For Customer Support please call: 650.572.7000

Customer Contact Information:

Entone, Inc.
20863 Stevens, Creek Blvd
Suite 300,
Cupertino, CA 95014
U.S.A.
Tel: 650.572.7000
www.entone.com

Table of Contents

Declaration of Conformity 3
1.1 Introduction 4
Loading Batteries 4
2.1 Control using RF URC 5
RAP Installation (in remote room) 6
Connecting STB to the TV coax network 7
Janus without Tuner Connection 7
Janus with Tuner Connection 7
Amulet F1 Connection 7
RF URC Registration 8
3.1 Control using IR URC 9
IR Reception Range 10
4.1 Controlling Your Television and other A/V Devices 11
To Program a TV or AUX device 12
Toggle Power Key Punch-through Functionality 12
Toggle Volume Key Punch-through Functionality 12
Auto Search Procedures 13
Appendix A – Device Code 14
Appendix B – Other Features 24
Showing URC 4 Firmware Version 24
Showing Programmed Device Code 24

Copyright © 2011 Entone, Inc. All rights reserved

Declaration of Conformity

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Copyright © 2011 Entone, Inc. All rights reserved.

Chapter 1

1.1 Introduction

The Entone Universal Remote Control v4.x (URC 4) is designed to work either on Radio Signals (RF) or InfraRed (IR). It can control Janus Media Hub using RF from another room where is not at direct sight distance from the Janus. Or, it can use IR to control Amulet High Definition IP Television Receiver at direct sight distance. The URC 4 can also be used to control other A/V devices such as TV, DVD player and audio equipment using IR. There are two types of Entone URC 4: IR only (IR URC) and IR+RF (RF URC). IR URC is included in the package of Janus/Amulet while RF URC is included in Entone Second Stream Kit.

Loading Batteries

The URC 4 comes with AA-size batteries, which need to be installed when you first receive your system. When you replace old batteries, you should replace all of the batteries. Use batteries of the same kind, for example alkaline or carbon zinc, and do not mix batteries of different kinds. Alkaline batteries last longer than carbon zinc.

Warning: Mixing old and new batteries or different types of batteries poses a fire hazard.

To load batteries to URC 4:

1. Press down on the battery cover's top latch and slide the cover off.
2. If you are changing out batteries, take out all of the old batteries.
3. Put the new batteries in. Make sure you match the plus ("+") ends with the plus markings on the battery case.
4. Slide the cover back into place.

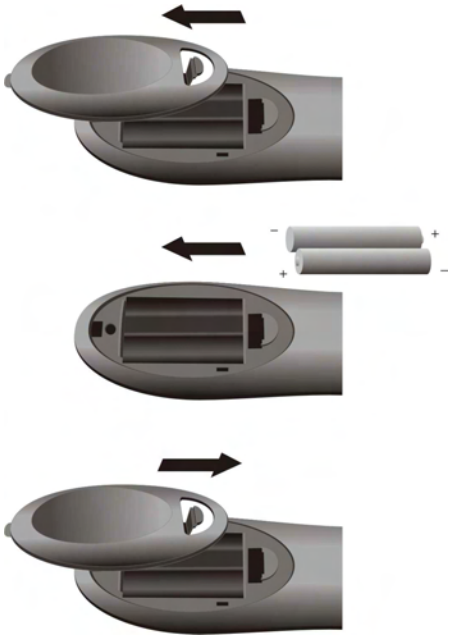


Figure 1-1 Loading Batteries to URC 4

Copyright © 2011 Entone, Inc. All rights reserved.

Chapter 2

2.1 Controlling STB using RF URC

Janus is a multi-television media hub. It can support multiple outputs in multiple rooms viewing different channels or TV programs. Amulet is a single output video receiver. You can connect Amulet to a primary output only.

You can use RF URC 4 to control Janus/Amulet using radio signals (RF). These radio signals travel over long distances and go though walls and other solid objects. You must connect the Remote Antenna Package (RAP) to the rear panel of the Janus/Amulet.

Your Janus/Amulet comes with one IR URC 4 to be used for output 1 (primary). (Additional RF URC 4 can be purchased separately.) Your RF URC 4 must be registered to one of the 2 outputs (primary or secondary) before it can be used. One RF URC 4 can only be registered to one output. However, you can register at most 3 RF URC 4 to an output. After registration, you need to use the corresponding RF URC 4 to control the outputs.

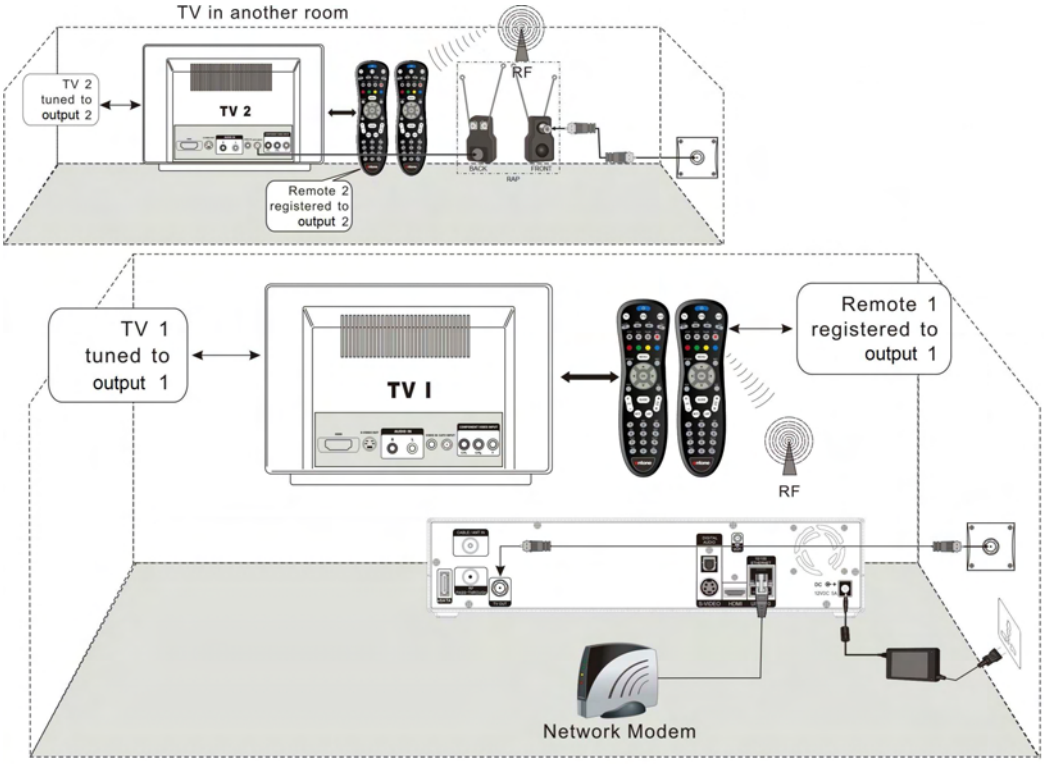


Figure 2-1 Controlling STB using RF URC 4

Copyright © 2011 Entone, Inc. All rights reserved.

Here are some principles of the remote registration method:

- Each output allows a maximum of 3 RF URC 4 to be registered and a registration list is maintained. If the user has registered 3 RF URC 4 and tries to register another RF URC 4, the first registered RF URC 4 will be removed from the registration list. This works as a first-in-first-out fashion.
- Each RF URC 4 can only be registered for one output. If user tries to register a RF URC 4 which is already registered to another output, that remote registration will be removed from the original registration list.
- The registration list is maintained in order. If the secondly registered RF URC 4 is removed from the list, the third entry will move forth to the second and the third will be blank for a new RF URC 4 to be registered.

You must install the Remote Antenna Package (RAP) comes with Entone Second Stream Kit before doing the registration. Please refer to the following sections for installing the RAP.

RAP Installation (in remote room)

Please follow the following diagram to install the RAP. The RAP is used to enhance the URC radio frequency transmission using the TV coax cable network in your home.

1 Plug the RAP into the TV.
2 Connect the TV coax cable to the RAP and the TV coax network wall outlet.

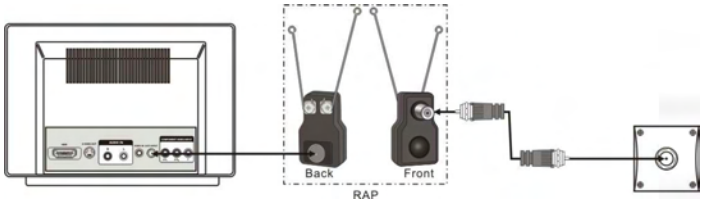


Figure 2-2 Attaching Remote Antenna Package

NOTE: Don't let the antenna touch anything.

ATTENTION: If your URC 4 isn't working very well from far away, you may be experiencing interference from objects near your receiver. To improve your URC 4's reception range, try to adjust the antenna orientation using screwdriver as shown. You may need to try different antenna orientation to achieve the best reception.

Figure 2-3 Adjusting Antenna Orientation

Copyright © 2011 Entone, Inc. All rights reserved.

Connecting STB to the TV coax network

Connect the Entone STB to the TV coax network wall outlet according to whether you are using an Entone Janus or Amulet STB. The rear panel of actual product may vary.

1. Janus without Tuner Connection: Connect the Janus "MATV" or "TV OUT" output to the TV coax network as shown.

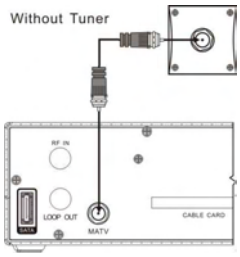


Figure 2-4 Connecting Janus without Tuner

2. Janus with Tuner Connection: Connect the Janus "MATV" or "TV OUT" and "RF IN" or "CABLE/ANT IN" output to the TV coax network as shown using a 3-way splitter (which is not provided).

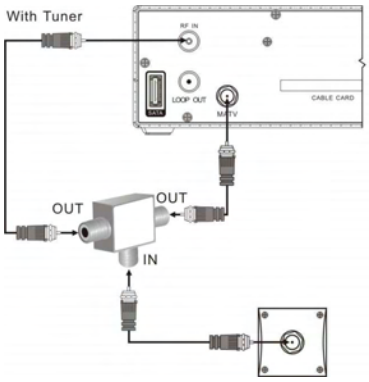


Figure 2-5 Connecting Janus with Tuner

3. Amulet F1 Connection: Connect the Amulet "REMOTE CONTROL" and "COAX" or "TV OUT" output to the TV coax network as shown using a 3-way splitter (which is not provided).

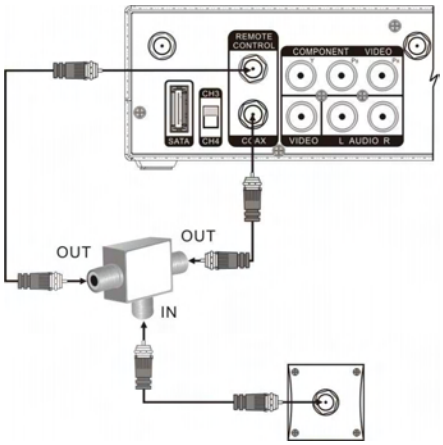


Figure 2-6 Connecting Amulet

Copyright © 2011 Entone, Inc. All rights reserved.

RF URC Registration

You may need to register the RF URC to the STB before you can use the remote. The RF URC registration procedures may vary for different middleware and TV service running in the Entone STB. Please refer to the TV service user guide for detailed RF URC registration procedures.

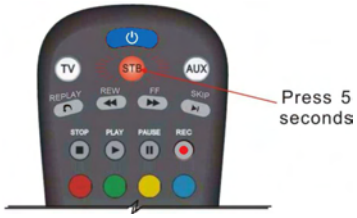
Below lists the general RF URC registration procedures (NOTE: Refer to your TV service user guide for exact RF URC registration procedures):

1. Press and hold the "OK" button on the STB front panel for 5 seconds until the touch panel backlight is flashing. The STB is now in URC registration mode.

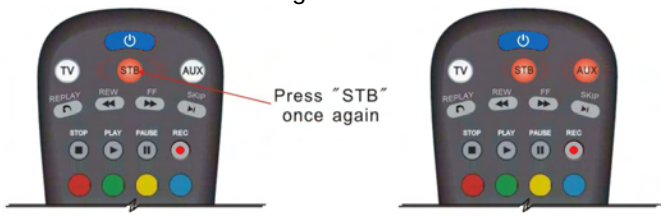
Figure 2-5 Janus in Remote Registration Mode

NOTE: If registration is not completed in 30 seconds, the touch panel backlight will stop flashing.

2. Press "STB" button once on the URC.
3. Press and hold the "STB" button on the URC for 5 seconds until the "STB" button backlight is on.



4. Press "STB" button once again. Both the "STB" and "AUX" button backlight will illuminate.



5. Press "1" or "2" to register the URC to output 1 (primary) or output 2 (secondary) (depending on the middleware).

   Upon successful registration, the STB POWER indicator will flash once and the touch panel backlight will stop flashing.

NOTE:

- The POWER key can be configured to control both the STB and TV while the URC 4 is in "STB" mode, please refer to the section "Toggle Power Key Punch-through Functionality" in Chapter 4 for details.
- The Volume +/- and MUTE key can be configured to control both the STB and TV while the URC 4 is in "STB" mode, please refer to the section "Toggle Volume Key Punch-through Functionality" in Chapter 4 for details.

Copyright © 2011 Entone, Inc. All rights reserved.

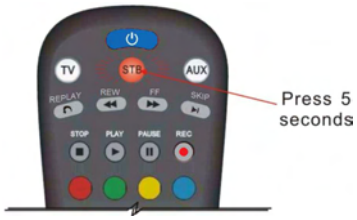
Chapter 3

3.1 Controlling STB using IR URC

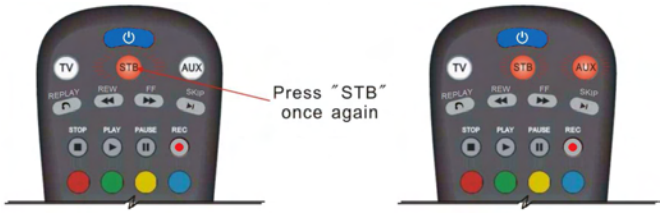
Unlike RF, you do not need to do remote registration in order to use URC 4 to control Janus/Amulet through IR. The remote comes with Janus/Amulet is IR URC 4. However, you have to program the RF URC 4 comes with Entone Second Stream Kit to use IR mode.

To set the RF URC 4 to use IR to control Janus/Amulet:

1. On the URC 4, press and hold the "STB" button for approx. 5 seconds. The "STB" button backlight will illuminate. Now the URC 4 is in registration mode.



2. On the URC 4, press "STB" once again. Both the "STB" and "AUX" button backlight will illuminate.



3. Press "0" to set RF URC 4 to IR mode only. The RF URC 4 will not send any RF signal.

   The "STB" button backlight on the URC 4 will blink twice to indicate that the setting was successful.

   Pressing a key other than "0", "1", "2", "3" or a button is not pressed within 30 seconds, the "STB" backlight will blink rapidly for 7 times to indicate an error and then extinguish, and the URC 4 registration process will be terminated.

Copyright © 2011 Entone, Inc. All rights reserved.

IR Reception Range

IR signals travel only short distances (40 feet or less), and cannot go through walls or other solid objects. You must point the URC 4 to the STB, with no objects blocking the line of sight.

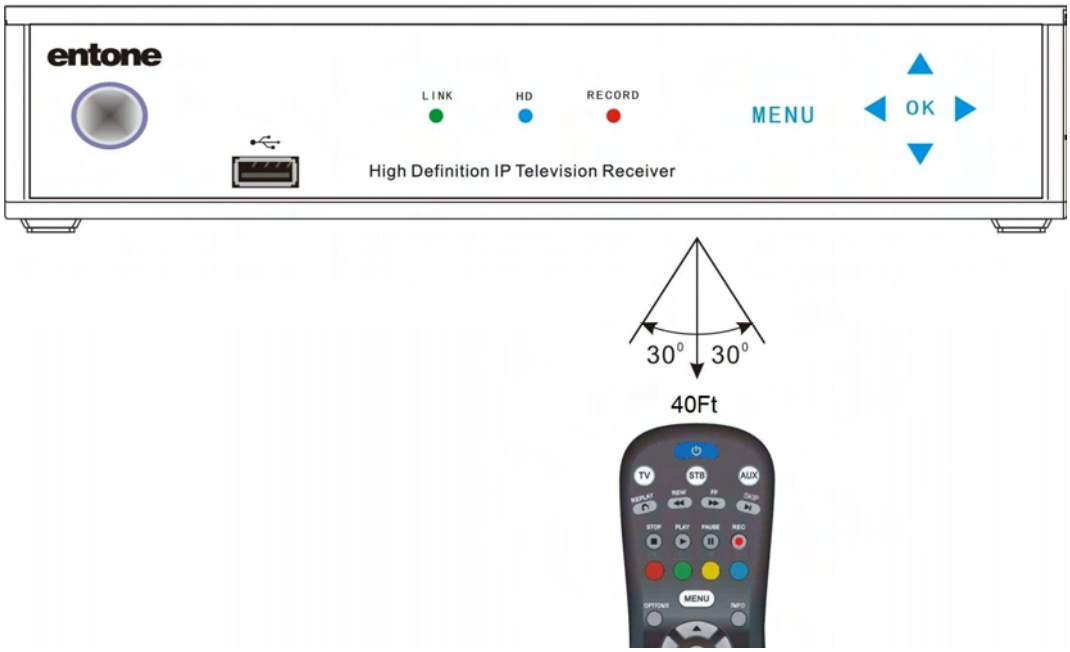


Figure 3-4 IR Reception Range

Copyright © 2011 Entone, Inc. All rights reserved.

Chapter 4

4.1 Controlling Your Television and other A/V Devices

The URC 4 can also be used to control TVs and other A/V devices such as DVD players and recorders. The URC 4 uses InfraRed (IR) light signals to control other devices that the remote is programmed to control. IR signals travel only short distances (40 feet or less), and cannot go through walls or other solid objects. You must point the URC 4 directly at these devices, with no objects blocking the line of sight.

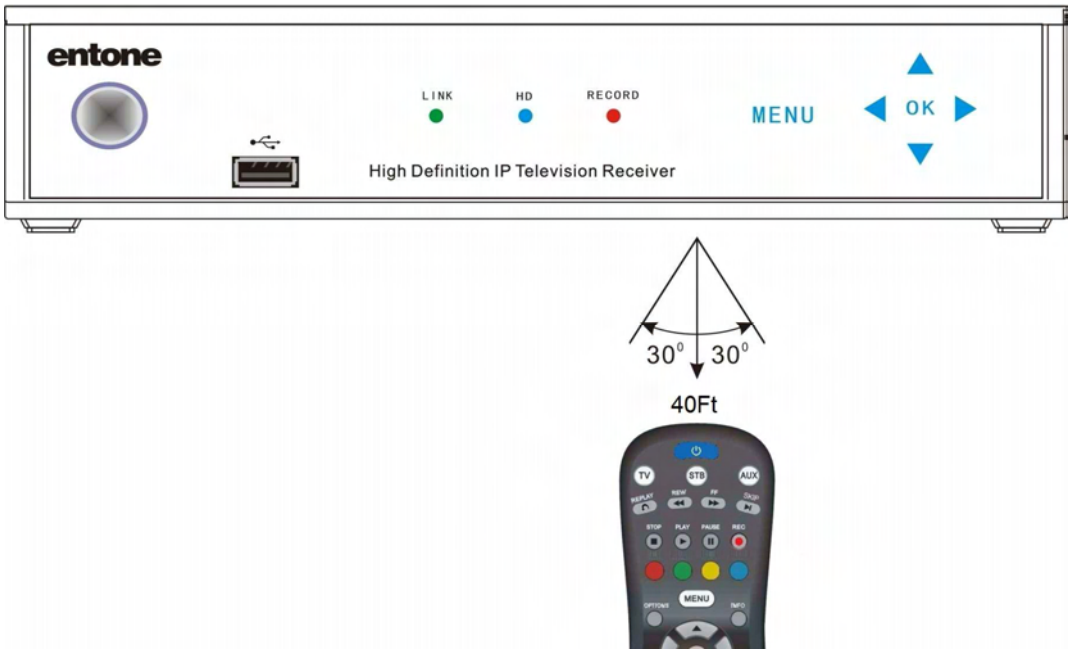


Figure 4-1 Controlling Devices using URC 4

You can program URC 4 to control one TV and one AUX device. Use the remote control's mode keys (i.e., "STB", "TV", or "AUX") to control a specific device. When pressed, the selected mode key will light up confirming your choice. Then you can use the URC 4 to control your STB, TV or AUX device.

You have to program the URC 4 what TV and AUX devices you are using by either 1) entering the 4-digit device code 2) doing an auto search.

NOTE:

- The POWER key can be configured to control both the STB and TV while the URC 4 is in "STB" mode, please refer to the section "Toggle Power Key Punch-through Functionality" in Chapter 4 for details.
- The Volume +/- and MUTE key can be configured to control both the STB and TV while the URC 4 is in "STB" mode, please refer to the section "Toggle Volume Key Punch-through Functionality" in Chapter 4 for details.

Copyright © 2011 Entone, Inc. All rights reserved.

To Program a TV or AUX device

1. Locate the device code for your desired device in the device code table provided in the Appendix. If you could not find the device code for your device or it does not work after trying the listed device codes for your device brand, then you can go to the next section to try the auto search procedures.
2. Turn on your device and with media inserted (if applicable).
3. On the remote control, press a device mode key for 5 seconds (i.e., "TV" or "AUX"). The device mode key will light up.

   NOTE: Use the "AUX" mode key to program control of VCR, DVD player, cable box, satellite set-top-box and audio device.

4. Enter the four-digit device code for you device. If you perform this procedure correctly, the selected device mode key backlight will blink twice.

   NOTE: If you enter an invalid device code, the selected device mode key will fast blink 7 times. Device program mode will be terminated.

5. Aim the remote control at your device and press the "POWER" once. The device should be turned off. If it does not respond, repeat the above steps.

   NOTE: In the programming mode if no key is received within 30s, the device mode key backlight will blink rapidly for 7 times to indicate an error and then extinguish, and the programming mode will end.

Toggle Power Key Punch-through Functionality

By default, if the remote control is in STB mode, the URC Power button switches STB off ONLY. To control the URC Power button functionality to switch off either both the TV and/or STB, do the following:

1. Press and hold the "STB mode key for 5s. The "STB" device mode key backlight will light up.
2. Press "POWER" key once.
3. Either do the following:
   a. Press 1 to control both the STB and TV, OR
   b. Press 0 to control the STB ONLY

NOTE: In the programming mode if no key is received within 30s, the device mode key backlight will blink rapidly for 7 times to indicate an error and then extinguish, and the programming mode will end.

Toggle Volume Key Punch-through Functionality

By default, Vol +/- and MUTE keys are sent to STB only when URC is in STB mode.

Punch-through function for those keys is enabled at the same time when programming the device code for TV or AUX. That is:
1. If user program device code for a TV device, the punch through function will be configured for TV at **the same time.**
2. If user program device code for an AUX device, the punch through function will be configured for AUX at **the same tim**e.

To disable the Punch-through function for those keys, do the following:
1. Press and Hold STB for 5 seconds, then STB led will switch on.
2. Press STB key once again, then both STB and AUX led will switch on.
3. Press 0

Copyright © 2011 Entone, Inc. All rights reserved.

Auto Search Procedures

If your device does not respond to the remote control after trying all devices codes listed for you brand, or if your brand is not listed at all, try searching for your device code as follows:

1. Turn on your TV or your A/V device.
2. On the remote control, press a device mode key (i.e., "TV" or "AUX") and hold for 5s. The device mode key will light up.

   NOTE: Use the "AUX" mode key to program control of VCR, DVD player, cable box, satellite set-top-box and audio device.

3. Press the "POWER" key once.
4. Aim the remote control at the device. Press either the "CH UP" key or "CH DOWN" key to do device auto-scan:
   a. Press the "CH UP" key to start searching upward at an approx. 5 seconds interval for each device code. The TV/AUX mode key will be on and blink every 5 seconds while in the device scan mode.

   NOTE: In this search mode, the remote control will send IR codes from the library starting from the lowest code set number to the end of code set for that device; **OR**

   b. Press the "CH DOWN" key to start searching downward at an approx. 5 seconds interval for each code set. The TV/AUX mode key will be on and blink every 5 seconds while in the device scan mode.

   NOTE: In this search mode, the remote control will send IR codes from the highest code set number to the beginning of code set of that device.

5. If the device turns off, a working code has been found. Press OK once to lock in the code. The selected mode key will blink twice
6. If all code sets of that device is exhausted in the search and the OK is not pressed, the selected device key will fast blink 7 times and the search mode will be terminated.

NOTE: During the auto-scan, you can press "UP" arrow or "DOWN" arrow to advance to the next device code immediately without waiting for 5 seconds. You can also use "UP" arrow or "DOWN" arrow to change the direction of the search.

NOTE: In the programming mode if no key is received within 30s, the device mode key backlight will blink rapidly for 7 times to indicate an error and then extinguish, and the programming mode will end.

Copyright © 2011 Entone, Inc. All rights reserved.

Appendix

Appendix A – Device Code

Your URC 4 can control many brands and models of television, VCR, DVD and other types of audio-visual equipment. The following pages list device codes for many categories and brands of equipment. Many brands list more than one code, and you may need to test several codes to find the best match for your equipment. Your equipment may be supported even if your brand is not shown in the list below. If you cannot locate your brand, or none of the listed device codes works, then you may still use the Auto-Search feature to try to locate a suitable device code. Instructions for using the Auto-Search feature are located on page 13 of this guide.

TV - Digital TV

Samsung	0163
Zenith	0165

TV - HD Plasma Display

RCA	0242, 0262

TV - HDTV

Apex	0083
Daewoo	0267
Hitachi	0091
ILO	0094
JVC	0071
Mitsubishi	0111, 0238, 0013, 0147
Panasonic	0311, 0012
Philips	0192, 0303, 0000, 0244
Proscan	0138
RCA	0138, 0158, 0140, 0262
Sampo	0055
Sharp	0198
Sony	0236, 0035, 0043, 0231
Zenith	0103, 0105

TV - HDTV Monitor

Brillian	0184
Panasonic	0161
Philips	0217
RCA	0282
Sears	0184

TV - HDTV Projection Monitor

Panasonic	0215, 0299, 0310
Pioneer	0010, 0058
Zenith	0091

TV - HDTV Projection TV

Panasonic	0196
Sony	0236

TV - LCD HDTV

Akai	0108
ILO	0059
Olevia	0142
Polaroid	0212
Syntax	0142
Westinghouse	0021
Zenith	0018

TV - LCD Projection TV

Epson	0247
LG	0207
Panasonic	0033
Sony	0243, 0053, 0292

TV - LCD TV

Akai	0270
AOC	0275
Audiovox	0205, 0003, 0150
Benq	0028
Coby	0306
Dell	0070, 0256, 0230
Emerson	0115
Emprex	0134
Funai	0144
Hisense	0109
HP	0191
Initial	0271
Insignia	0139
JVC	0251, 0101, 0194
LG	0148, 0308, 0040, 0172
Magnavox	0044, 0271
Maxent	0098
Mintek	0271
Mitsubishi	0238
NEC	0149
NET-TV	0197
Norcent	0275
Olevia	0168
Panasonic	0253, 0038, 0285, 0117, 0291
Philips	0034, 0112
Polaroid	0130, 0089, 0078, 0281, 0167
RCA	0242
Samsung	0187, 0166, 0234, 0177, 0057, 0093, 0283, 0296, 0180
Sansui	0199
Sanyo	0031, 0298
Sharp	0008, 0160, 0219, 0084, 0241, 0060, 0294, 0074
Sony	0243, 0155, 0035, 0126, 0090
Sylvania	0144, 0115, 0284
Syntax	0168
Tatung	0092
Toshiba	0042, 0222, 0064
Trutech	0206

Copyright © 2011 Entone, Inc. All rights reserved.

Viewsonic	0021, 0085, 0107, 0026, 0290, 0174, 0082, 0277, 0255, 0069, 0304
Vizio	0002
Westinghouse	0021, 0063, 0054
Zenith	0146

TV - LCD TV/PC Monitor

Sampo	0280

TV - LCD TV/Tuner Combo

Polaroid	0130

TV - Plasma Display

Acer	0229
Daewoo	0067
Fujitsu	0240
Funai	0250
Panasonic	0195
Pioneer	0203, 0077, 0065
Samsung	0171, 0118, 0095, 0258
Toshiba	0099
Viewsonic	0156, 0106
Zenith	0183, 0214, 0226

TV - PLASMA TV

Akai	0201
Elite	0213
Gateway	0269
Hewlett Packard	0123
HP	0191
ILO	0237
LG	0133, 0172
Magnavox	0047, 0025
Panasonic	0033, 0104, 0179
Pioneer	0213
Samsung	0166, 0254
Sanyo	0131
Sony	0155
SVA	0185
Viewsonic	0080
Vizio	0002

TV - Plasma TV Monitor

Akai	0170
Fujitsu	0252, 0049, 0260, 0186, 0257
Hitachi	0091, 0041, 0080, 0314
Marantz	0224
NEC	0224
NET-TV	0004
Panasonic	0039
Pioneer	0208
Plasmsync	0224
Sony	0289, 0086
Toshiba	0224, 0120
Zenith	0011

TV - Projection HDTV

Sharp	0313, 0246

TV - Projection TV

Hitachi	0091, 0066, 0141, 0100, 0020, 0261, 0235
JVC	0071, 0248
Magnavox	0202
Mitsubishi	0263, 0111, 0238, 0013, 0147, 0073, 0137
Panasonic	0033, 0196, 0110
Philips	0132
Pioneer	0152
RCA	0138, 0158
Samsung	0007, 0300, 0218, 0119
Sharp	0127
Sony	0243, 0178, 0135, 0125
Toshiba	0307, 0159, 0081, 0006
Zenith	0164

TV - TV

Admiral	0223, 0288, 0129
Advent	0312
Adventura	0143
Aiwa	0124
Akai	0153, 0177, 0046, 0287
Alleron	0268
America Action	0097
Amtron	0182
Anam	0097
Anam National	0279, 0182
AOC	0239, 0308
Apex	0249, 0264
Apex Digital	0227
Audiovox	0182, 0097
Aventura	0295
Belcor	0308
Bell & Howell	0223, 0014
Benq	0079
Bradford	0182, 0097
Brockwood	0308
Broksonic	0097, 0288, 0032, 0046, 0199
Candle	0143, 0308
Carver	0122
Celebrity	0153
Celera	0227
Changhong	0227
Citizen	0182, 0221, 0308, 0061
Clarion	0097
Colortyme	0308
Colt	0076
Concerto	0308
Contec	0097
Contec/Cony	0182
Craig	0182, 0097
Crosley	0122
Crown	0182, 0097
CTX	0027
Curtis Mathes	0017, 0014, 0221, 0122, 0209, 0308, 0129
CXC	0182, 0097
Cytron	0051, 0220
Daewoo	0239, 0062, 0274, 0308, 0061
Daytron	0308
Denon	0209
Diamond Vision	0045, 0216, 0188
Dimensia	0017
Dumont	0286, 0308

Copyright © 2011 Entone, Inc. All rights reserved.

Durabrand	0048, 0295, 0097, 0288
Dwin	0129
Electroband	0153
Electrograph	0228
Electrohome	0153, 0279, 0308
Emerson	0182, 0268, 0014, 0295, 0097, 0288, 0062, 0032, 0162, 0308, 0276, 0061
Envision	0308
Epson	0301
ESA	0295, 0177
Fisher	0014
Fujitsu	0268
Funai	0182, 0268, 0295, 0097, 0169
Futuretech	0182, 0097
Gateway	0228, 0173
GE	0017, 0279, 0309, 0138, 0308, 0245, 0087
Gibralter	0286, 0308
Goldstar	0239, 0308, 0030
Grunpy	0182, 0268, 0097
Haier	0048
Hallmark	0308
Harley Davidson	0169
Harman/Kardon	0122
Harvard	0182, 0097
Havermy	0129
Hisense	0116
Hitachi	0209, 0091, 0273, 0308, 0169
Ilo	0271
IMA	0182
Infinity	0122
Insignia	0001, 0278, 0211
Janeil	0143
JBL	0122
JC Penney	0017, 0239, 0221, 0308
JCB	0153
Jensen	0308
JVC	0102, 0175, 0297, 0259, 0096, 0121
Kawasho	0153, 0308
KEC	0097
Kenwood	0308
KLH	0227
Kloss Novabeam	0182, 0143
KTV	0182, 0097
LG	0239
Lloyd's	0169
Logik	0223
Luxman	0308
LXI	0017, 0014, 0122
Magnasonic	0061
Magnavox	0122, 0022, 0009, 0308, 0276, 0169
Magnin	0245
Majestic	0223
Marantz	0122, 0308
Maxent	0228
Megatron	0209
Memorex	0223, 0239, 0014, 0288, 0144, 0019, 0075, 0030
MGA	0239, 0308, 0245
Midland	0286
Mitsubishi	0239, 0263, 0308, 0129, 0087
Montgomery Ward	0223
Motorola	0279, 0129
MTC	0239, 0221, 0308
Multitech	0182, 0097
NEC	0279, 0239, 0308
Net-TV	0228
Norcent	0116
Onwa	0182, 0097
Optimus	0075
Optonica	0225, 0129
Orion	0288, 0001, 0032
Panasonic	0279, 0056, 0036, 0196, 0190, 0176, 0029, 0075
Penney	0245, 0030
Philco	0279, 0239, 0122, 0050, 0308
Philips	0279, 0122, 0068, 0128, 0114, 0016, 0308
Philips Magnavox	0068, 0022, 0114
Pilot	0308
Pioneer	0308
Polaroid	0227, 0204
Portland	0239, 0308
Price Club	0221
Prima	0312
Proscan	0017, 0138
Proton	0308
Pulsar	0286, 0308
Quasar	0279, 0075
Radio Shack	0014, 0097, 0169
Radio Shack/Realistic	0017, 0182, 0014, 0225, 0308
RCA	0017, 0279, 0239, 0266, 0138, 0157, 0242, 0023, 0308, 0005, 0262, 0245
Realistic	0014, 0097
Runco	0286
Sampo	0228, 0265, 0308
Samsung	0239, 0221, 0232, 0233, 0177, 0193, 0308
Sansui	0288, 0316, 0001, 0032, 0046, 0199, 0169
Sanyo	0014, 0308, 0245
Scott	0182, 0268, 0097, 0308
Sears	0017, 0268, 0014, 0145, 0122, 0295, 0308, 0169, 0030
Sharp	0225, 0308, 0113, 0129
Sheng Chia	0129
Shogun	0308
Signature	0223
Sony	0153, 0243, 0072, 0154, 0302, 0305, 0037, 0169

Copyright © 2011 Entone, Inc. All rights reserved.

Soundesign	0182, 0268, 0097, 0308
Squareview	0145, 0295
SSS	0182, 0097, 0308
Starlite	0182, 0097
Superscan	0276, 0129
Supre-Macy	0143
Supreme	0153
Sylvania	0122, 0295, 0024, 0315, 0308, 0276
Symphonic	0182, 0145, 0295, 0097, 0272, 0169
Tandy	0129
Tatung	0279, 0173
Techwood	0308
Teknika	0223, 0239, 0182, 0268, 0221, 0122, 0097, 0308
Thomas	0169
TMK	0308
Toshiba	0014, 0221, 0200, 0136, 0015, 0293, 0189, 0046, 0052, 0210, 0151
TVS	0288
Vidikron	0122
Vidtech	0239, 0308
Viewsonic	0228
Viking	0143
Vizio	0173
Wards	0017, 0223, 0239, 0268, 0225, 0122, 0308
White Westinghouse	0288, 0062
Yamaha	0239, 0308
Zenith	0223, 0288, 0286, 0088, 0032, 0308, 0169

TV - TV Monitor

Sony	0181

TV - TV/DVD/Tuner Combo

Panasonic	0176
Sony	0126

TV - TV/DVD/VCR/Tuner Combo

Polaroid	0281

TV - TV/Tuner

Audiovox	0205, 0003

TV - TV/VCR Combo

Broksonic	0032
Citizen	0061
Colt	0076
Daewoo	0061
Emerson	0032, 0061
Funai	0169
GE	0245, 0087
Goldstar	0030
Harley Davidson	0169
Hitachi	0169
Lloyd's	0169
Magnasonic	0061
Magnavox	0169
Magnin	0245
Memorex	0075, 0030
MGA	0245
Mitsubishi	0087
Optimus	0075
Orion	0032
Panasonic	0075
Penney	0245, 0030
Quasar	0075
RadioShack	0169
RCA	0245, 0087
Sansui	0032, 0169
Sanyo	0245
Sears	0169, 0030
Sony	0169
Symphonic	0169
Thomas	0169
Zenith	0032, 0169

TV - TV/DVD Combo

Aiwa	0124
Akai	0046, 0270
Apex	0264
Audiovox	0150
Broksonic	0046, 0199
Coby	0306
Cytron	0220
Diamond Vision	0216
Emerson	0162
Ilo	0271
Initial	0271
JVC	0121
LG	0308, 0040
Magnavox	0271
Mintek	0271
Panasonic	0190
Philips	0016, 0271
RCA	0023
Samsung	0193
Sansui	0046, 0199, 0199
Sylvania	0315, 0284
Toshiba	0046, 0052, 0210

TV - TV/DVD/VCR Combo

Akai	0287
Diamond Vision	0188
Emerson	0276
Magnavox	0276
Memorex	0019
Panasonic	0029
Polaroid	0204
RCA	0005
Samsung	0193
Sharp	0113
Superscan	0276
Sylvania	0276
Toshiba	0151

VCR - VCR

ABS	3053
Adventura	3062
Aiwa	3062
Akai	3068, 3039
Alienware	3053
American High	3021
Asha	3052
Audio Dynamics	3024
Audiovox	3043
Beaumark	3052

Copyright © 2011 Entone, Inc. All rights reserved.

Bell & Howell	3083
Broksonic	3051, 3067, 3060, 3022
Calix	3043
Candle	3052, 3043
Canon	3021
Citizen	3052, 3043, 3097
Colortyme	3024
Colt	3008
Craig	3052, 3043
Curtis Mathes	3020, 3024, 3052, 3021, 3011
Cybernex	3052
Cyperpower	3053
Daewoo	3062, 3010, 3055, 3097
DBX	3024
Dell	3053
Diamond Vision	3058
Dimensia	3020, 3011
Durabrand	3073
Dynatech	3062
Electrohome	3043
Electrophonic	3043
Emerson	3043, 3021, 3062, 3063, 3049, 3003, 3097, 3022
ESA	3007
Fisher	3083, 3050, 3087
Fuji	3068, 3021
Funai	3062, 3037, 3063, 3091
Garrard	3062
Gateway	3053
GE	3020, 3052, 3021, 3011, 3069, 3019
Go Video	3027
Goldstar	3024, 3043, 3064, 3001
Gradiente	3062
Harley Davidson	3062, 3091
Harman/Kardon	3024
Headquarter	3083
Hewlett Packard	3053
Hitachi	3066, 3014, 3091
Howard Computers	3053
HP	3053
Hush	3053
iBUYPOWER	3053
Insignia	3082
Instant Replay	3021
JC Penney	3024, 3083, 3052, 3043, 3021
JCL	3021
JVC	3024, 3083, 3098, 3044, 3041, 3089, 3028, 3017, 3025, 3034, 3071, 3046, 3054, 3094, 3030
Kenwood	3024, 3083
Kodak	3043, 3021
LG	3043, 3075, 3082, 3081
Linksys	3053
Lloyd's	3062, 3091
LXI	3043
Magnasonic	3097
Magnavox	3021, 3073, 3013, 3085, 3003, 3091
Magnin	3043, 3069
Marantz	3024, 3083, 3021
Marta	3043
Matsushita	3021
Media Center PC	3053
MEI	3021
Memorex	3083, 3052, 3043, 3021, 3062, 3073, 3038, 3090, 3067, 3009, 3092, 3001
MGA	3069
MGN Technology	3052
Microsoft	3053
Mind	3053
Mitsubishi	3031, 3019
Motorola	3021
MTC	3052
Multitech	3052, 3062
NEC	3024, 3083
Nikko	3043
Niveus Media	3053
Noblex	3052
Northgate	3053
Olympus	3021
Optimus	3043, 3092
Orion	3038, 3022
Panasonic	3021, 3040, 3023, 3096, 3070, 3076, 3092
Penney	3069, 3001
Philco	3021
Philips	3021, 3013, 3063, 3074
Philips Magnavox	3013
Pilot	3043
Pioneer	3002
Polaroid	3059, 3077
Presidian	3063
Proscan	3020, 3011, 3016
Pulsar	3073
Quarter	3083
Quartz	3083
Quasar	3021, 3092
Radio Shack	3043, 3091
Radio Shack/Realistic	3083, 3052, 3043, 3021, 3062
Radix	3043
Randex	3043
RCA	3020, 3052, 3021, 3011, 3088, 3035, 3000, 3079, 3069, 3019
Realistic	3083, 3052, 3043, 3021, 3062
Ricavision	3053
Ricoh	3026
Runco	3073
Samsung	3052, 3048, 3012
Sanky	3073

Copyright © 2011 Entone, Inc. All rights reserved.

Sansui	3038, 3047, 3067, 3091, 3022
Sanyo	3083, 3052, 3050, 3087, 3093, 3069
Sears	3083, 3043, 3021, 3091, 3001
Sharp	3084, 3065, 3086, 3078, 3015, 3056, 3018
Shintom	3068
Shogun	3052
Singer	3021, 3026
Sony	3068, 3042, 3053, 3005, 3033, 3004, 3072, 3029, 3091
Stack	3053
STS	3021
Superscan	3003
Sylvania	3021, 3062, 3063, 3032, 3003
Symphonic	3062, 3037, 3063, 3091
Systemax	3053
Tagar Systems	3053
Tandy	3083
Tashiko	3043
Teac	3062
Technics	3021
Teknika	3043, 3021, 3062
Thomas	3091
TMK	3052
Toshiba	3053, 3057, 3095, 3006, 3045, 3036
Totevision	3052, 3043
Touch	3053
Unitech	3052
Vector Research	3024
Video Concepts	3024
Videosonic	3052
Viewsonic	3053
Voodoo	3053
Wards	3052, 3043, 3021, 3062
White Westinghouse	3037
XR-1000	3021, 3062
Yamaha	3024, 3083
Zenith	3068, 3026, 3073, 3061, 3082, 3099, 3091, 3022
ZT Group	3053

VCR - DVD-DVR/VCR Combo

JVC	3017, 3071, 3054, 3080

VCR - TV/VCR Combo

Broksonic	3022
Citizen	3097
Colt	3008
Daewoo	3097
Emerson	3097, 3022
Funai	3091
GE	3069, 3019
Goldstar	3001
Harley Davidson	3091
Hitachi	3091
Lloyd's	3091
Magnasonic	3097
Magnavox	3091
Magnin	3069
Memorex	3092, 3001
MGA	3069
Mitsubishi	3019
Optimus	3092
Orion	3022
Panasonic	3092
Penney	3069, 3001
Quasar	3092
RadioShack	3091
RCA	3069, 3019
Sansui	3091, 3022
Sanyo	3069
Sears	3091, 3001
Sony	3091
Symphonic	3091
Thomas	3091
Zenith	3091, 3022

VCR - TV/DVD/VCR Combo

Akai	3039
Diamond Vision	3058
Emerson	3003
Magnavox	3003
Memorex	3009
Panasonic	3076
Polaroid	3077
RCA	3079
Samsung	3012
Sharp	3018
Superscan	3003
Sylvania	3003
Toshiba	3036

VCR - DVD/VCR Combo

Broksonic	3051, 3067, 3060
Daewoo	3055
Emerson	3063, 3049
Funai	3063
Go Video	3027
Goldstar	3064
Hitachi	3066, 3014
Insignia	3082
JVC	3028, 3025, 3034, 3046, 3030
LG	3075, 3075, 3082, 3081
Magnavox	3085
Memorex	3067
Panasonic	3070
Philips	3063, 3074
Pioneer	3002
Polaroid	3059
Presidian	3063
RCA	3000
Samsung	3048
Sansui	3067, 3047
Sanyo	3093
Sharp	3015, 3078, 3056
Sony	3072, 3029
Sylvania	3063, 3032
Symphonic	3063
Toshiba	3006, 3045

Copyright © 2011 Entone, Inc. All rights reserved.

Zenith	3082, 3099

DVD - DVD

Advent	4234
Aiwa	4077
Akai	4093, 4088, 4129, 4199
Alco	4118
Alpine	4040
Amphion MediaWorks	4023
AMW	4023
Apex	4201, 4074, 4124
Apex Digital	4111
Aspire Digital	4246
Audiovox	4118, 4229, 4041, 4022
Blaupunkt	4111, 4188
Blue Parade	4117
BOSE	4095, 4235
Broksonic	4093, 4088, 4173
California Audio Labs	4017
CambridgeSoundWorks	4144
Clarion	4242
Classic	4218, 4140
Coby	4243, 4149, 4089, 4147
CyberHome	4107
Cytron	4116
Daewoo	4035, 4067
Denon	4017, 4222, 4054, 4037, 4090, 4047
Desay	4176
Diamond Vision	4158, 4075, 4014
Disney	4049
Emerson	4165, 4049, 4181, 4208, 4030, 4206, 4079
ESA	4167
Fisher	4065
Funai	4049, 4181, 4208
GE	4224, 4111
Go Video	4072
Goldstar	4162
GPX	4220
Gradiente	4017
Greenhill	4111
Grundig	4085
Harman/Kardon	4244
Hitachi	4180, 4156, 4028
Ilo	4066
Initial	4111, 4060
Insignia	4121
Integra	4209, 4117
JBL	4221
Jensen	4149
JVC	4152, 4006, 4212, 4056, 4245, 4186, 4123, 4064, 4195
Kawasaki	4118
Kenwood	4017, 4031
KLH	4118, 4111, 4214
Konka	4010
Koss	4002, 4011, 4052, 4099, 4239
Lasonic	4210
Lenoxx	4061
LG	4105, 4223, 4029
Liquid Video	4011
Magnavox	4165, 4198, 4085, 4049, 4050, 4060
Marantz	4085, 4168, 4193
Memorex	4093, 4225, 4012
Microsoft	4224
Mintek	4111, 4237, 4060
Mitsubishi	4207, 4155
NAD	4157
Nakamichi	4191
Nesa	4111
Norcent	4243, 4083, 4073, 4232
Onkyo	4209, 4198, 4027, 4062, 4159, 4133, 4058
Oritron	4002, 4011
Panasonic	4017, 4198, 4120, 4081, 4222, 4091, 4200, 4038, 4143, 4080, 4044, 4013
Philips	4198, 4085, 4049, 4019, 4070, 4208, 4247, 4078, 4009, 4161
Pioneer	4163, 4117, 4153, 4194, 4130, 4119
Polaroid	4230, 4016, 4069, 4102
Polk Audio	4085
Presidian	4049, 4208
Proscan	4224, 4226
Qwestar	4002
RCA	4118, 4224, 4117, 4111, 4007, 4226, 4042, 4086, 4185, 4160
Regent	4061
Rotel	4152
Rowa	4092
Sampo	4182
Samsung	4017, 4180, 4032, 4051, 4082, 4241, 4135, 4146
Sansui	4093, 4088, 4173, 4251
Sanyo	4093, 4132, 4213
Sharp	4049, 4204, 4131, 4202, 4115
Sherwood	4177, 4203
Shinco	4008
Shinsonic	4205
Sony	4205, 4216, 4174, 4045, 4169, 4166, 4189, 4240, 4094, 4211, 4154, 4048, 4127, 4142, 4249, 4217
Sungale	4228
Superscan	4165
Sylvania	4165, 4049, 4181, 4208, 4187, 4112, 4001
Symphonic	4049, 4104, 4208
Teac	4118, 4015
Technics	4017, 4222
Techwood	4137
Theta Digital	4117

Copyright © 2011 Entone, Inc. All rights reserved.

Toshiba	4093, 4198, 4184, 4071, 4088, 4024, 4173, 4175, 4100
Trutech	4059
Urban Concepts	4198
Venturer	4118, 4036
Xbox	4224
Yamaha	4017, 4085, 4106, 4101
Zenith	4198, 4025, 4021

DVD - DVD Recorder

Apex	4097
Broksonic	4026
Gateway	4190
Go Video	4190
Hitachi	4150, 4171
Insignia	4145
Irradio	4126
JVC	4046, 4000, 4057, 4003, 4164, 4179, 4227, 4098
LG	4148, 4076, 4170
LiteON	4248, 4238, 4215, 4005
Lite-On	4190
Panasonic	4084, 4043, 4151, 4039
Philips	4250, 4192, 4231, 4053
Pioneer	4068, 4138
RCA	4219
Samsung	4150, 4136, 4178
Sansui	4063
Sanyo	4034
Sensory Science	4190
Sharp	4096, 4108, 4087, 4109
Sony	4183
Sylvania	4233, 4033
Toshiba	4020, 4236, 4114
Yamaha	4139
Zenith	4018, 4122, 4170

DVD - DVD-DVR

JVC	4004, 4113, 4128, 4196
Pioneer	4055
RCA	4103
Toshiba	4125, 4110, 4134

DVD - DVD-DVR/VCR Combo

JVC	4004, 4113, 4128, 4196

DVD - TV/DVD/Tuner Combo

Panasonic	4143
Polaroid	4069
Sony	4127

DVD - TV/DVD Combo

Aiwa	4077
Akai	4088, 4129
Apex	4124
Audiovox	4229
Broksonic	4088, 4173
Coby	4089
Cytron	4116
Diamond Vision	4075
Emerson	4206
Ilo	4066
Initial	4060
JVC	4186
LG	4223, 4029
Magnavox	4060
Mintek	4060
Panasonic	4038
Philips	4078, 4060
RCA	4086
Samsung	4082
Sansui	4088, 4173, 4251
Sylvania	4112, 4001
Toshiba	4088, 4024, 4173

DVD - TV/DVD/VCR Combo

Akai	4199
Diamond Vision	4014
Emerson	4165
Magnavox	4165
Memorex	4012
Panasonic	4080
Polaroid	4102
RCA	4185
Samsung	4241
Sharp	4202
Superscan	4165
Sylvania	4165
Toshiba	4175

DVD - DVD/VCR Combo

Broksonic	4093, 4026, 4173
Daewoo	4067
Emerson	4208, 4030
Funai	4208
Go Video	4072
Goldstar	4162
Hitachi	4171, 4028
Insignia	4145
JVC	4000, 4245, 4057, 4003, 4164
LG	4148, 4076, 4170, 4105
Magnavox	4050
Memorex	4093
Panasonic	4200
Philips	4208, 4247
Pioneer	4138
Polaroid	4016
Presidian	4208
RCA	4042
Samsung	4051
Sansui	4093, 4063
Sanyo	4132
Sharp	4108, 4087, 4131
Sony	4154, 4048
Sylvania	4208, 4187
Symphonic	4208
Toshiba	4114, 4071
Zenith	4170, 4021

DVD - HTIB

Audiovox	4041, 4022
BOSE	4235
CambridgeSoundWorks	4144
Classic	4140
Coby	4147
Denon	4047
Emerson	4079
Insignia	4121
JBL	4221

Copyright © 2011 Entone, Inc. All rights reserved.

JVC	4123, 4064, 4195
Koss	4099, 4239
Onkyo	4159, 4133, 4058
Panasonic	4044, 4013, 4197
Philips	4009, 4161
Pioneer	4194, 4130, 4119
RCA	4219
Samsung	4135, 4146
Sanyo	4213
Sharp	4115
Sherwood	4203
Sony	4172, 4142, 4249, 4217, 4141
Toshiba	4100
Venturer	4036
Yamaha	4106, 4101

AUDIO - Amplifier

Denon	2041
JBL	2090
Krell	2068
Magnavox	2013
Marantz	2098
Parasound	2034, 2103
Pioneer	2070, 2031
RCA	2010
Rotel	2011
Soundmatters	2039
Technics	2008
Yamaha	2079, 2026

AUDIO - Audio Cassette

Curtis Mathes	2070
Magnavox	2013
Marantz	2008, 2013
Optimus	2070
Pioneer	2070
Technics	2008

AUDIO - Audio System

Curtis Mathes	2070
Pioneer	2070

AUDIO - LCD TV/Tuner Combo

Polaroid	2028

AUDIO - Phono

Magnavox	2013
Marantz	2013
Pioneer	2070

AUDIO - Receiver

JBL	2020
Sanyo	2071

AUDIO - Receiver/Amplifier

Yamaha	2026

AUDIO - Receiver/Tuner

Adcom	2078
Aiwa	2085, 2037, 2093
Audiovox	2077, 2036
BOSE	2060, 2032
CambridgeSoundWorks	2053
Carver	2085
Classic	2009
Coby	2045
Curtis Mathes	2070
Denon	2023, 2091, 2016
Emerson	2014
Harman/Kardon	2085, 2052, 2094
Insignia	2082, 2063, 2038
JBL	2020
JVC	2097, 2073, 2029, 2006, 2000, 2024
Kenwood	2019, 2072, 2044, 2089, 2099, 2012
Linn	2085
Magnavox	2013, 2085
Marantz	2008, 2013, 2085, 2056
Mitsubishi	2080
NAD	2095
Nakamichi	2033
Onkyo	2067, 2017, 2002, 2057, 2100, 2065
Optimus	2070, 2054
Panasonic	2008, 2088, 2058, 2007, 2051, 2066
Philips	2085, 2096, 2047
Pioneer	2070, 2048, 2062, 2074, 2030, 2027, 2022, 2049
Polk Audio	2050
Quasar	2008
RCA	2059
Rotel	2011
Samsung	2064, 2021
Sansui	2085
Sharp	2001
Sherwood	2046, 2015
Sony	2086, 2081, 2092, 2061, 2083, 2069, 2101, 2025
Technics	2008, 2088, 2058
Toshiba	2084
Wards	2085
Yamaha	2075, 2003, 2040, 2076

AUDIO - Tuner

Aiwa	2043
Audiovox	2087
Koss	2018
Panasonic	2007, 2004, 2042
Polaroid	2028, 2035
Sony	2055, 2025
Venturer	2036

AUDIO - Tuner/CD Combo

Aiwa	2043
BOSE	2060
Panasonic	2042

AUDIO - TV/DVD/Tuner Combo

Panasonic	2004
Polaroid	2035
Sony	2055

AUDIO - TV/Tuner

Audiovox	2087

AUDIO - TV/VCR/Tuner Combo

Panasonic	2007

AUDIO - HTIB

Audiovox	2077, 2036
BOSE	2032
CambridgeSoundWorks	2053
Classic	2009
Coby	2045

Copyright © 2011 Entone, Inc. All rights reserved.

Denon	2016
Emerson	2014
Insignia	2038
JBL	2020
JVC	2006, 2000, 2024
Koss	2018, 2018
Onkyo	2057, 2100, 2065
Panasonic	2051, 2066, 2102
Philips	2096, 2047
Pioneer	2027, 2022, 2049
RCA	2059
Samsung	2064, 2021
Sanyo	2071
Sharp	2001
Sherwood	2015
Sony	2101, 2025, 2025, 2025, 2005
Toshiba	2084
Venturer	2036
Yamaha	2040, 2076

CD - CD

ADC	4274
Aiwa	4272
BOSE	4269
Denon	4273
Harman Kardon	4270
JVC	4261, 4259
Kenwood	4263
Marantz	4275
McIntosh	4265
Nakamichi	4271
Onkyo	4257, 4278
Panasonic	4254, 4264
Philips	4262
Pioneer	4255
RCA	4256
Sanyo	4258
Sherwood	4268
Sony	4276, 4266, 4252
Teac	4277
Technics	4267
Yamaha	4260

CD - CD/CD Recorder

Philips	4262

CD - Tuner/CD Combo

Aiwa	4272
BOSE	4269
Panasonic	4254

Copyright © 2011 Entone, Inc. All rights reserved.

Appendix B – Other Features

Showing URC 4 Firmware Version

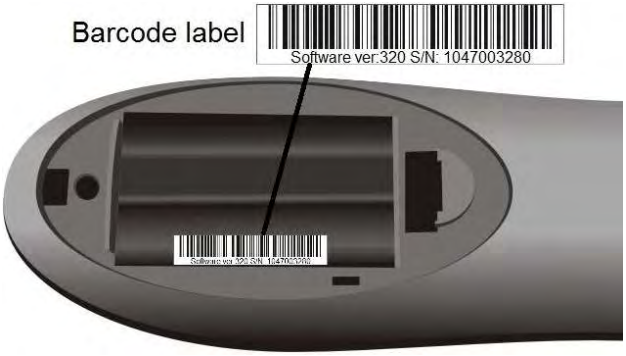
The URC 4 firmware version is in the format of x.y.z, where x, y and z is digit 0-9. Use the following procedures to show the URC 4 firmware version:

1. Press "STB" and hold for 5s. The "STB" backlight will illuminate.
2. Press "INFO" once.
3. The 3 digits of the firmware version (x, y and z as described above) will be displayed in the following manner.
    a. The "STB" backlight blinks to indicate the digit. One blink indicates 1, 2 blinks indicates 2, etc until 9 blinks indicates 9. A 0 is indicates by a shot, long, short, long, short, long blink.
    b. In between each digit, the "STB" backlight will be off for 1 second.
    c. For example, the following blink pattern shows a firmware version of 2.0.4.

        . . .-.-.- ....

NOTE: In the programming mode if no key is received within 30s, the device mode key backlight will blink rapidly for 7 times to indicate an error and then extinguish, and the programming mode will end.

In addition, the URC 4 Firmware version will also be shown on the sticker inside the battery compartment at the back of the remote control.



Showing Programmed Device Code

You can display the 4-digit device code by the following procedures:

1. Press and hold "TV" or "AUX" for 5 seconds. The "TV" or "AUX" backlight will illuminate.
2. Press "INFO" once.
3. The 4-digits device code will be displayed in the following manner.
    a. The "TV"/"AUX" backlight blinks to indicate the digit. One blink indicates 1, 2 blinks indicates 2, etc until 9 blinks indicates 9. A 0 is indicates by a shot, long, short, long, short, long blink.
    b. In between each digit, the "TV"/"AUX" backlight will be off for 1 second.
    c. For example, the following blink pattern shows a device code of 0123.

        .-.-.- . .. ...

NOTE: In the programming mode if no key is received within 30s, the device mode key backlight will blink rapidly for 7 times to indicate an error and then extinguish, and the programming mode will end.

Copyright © 2011 Entone, Inc. All rights reserved.